



Research Article

Library Anxiety Among Marginalized University Students in Northeast India

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Abstract

Objective – Library anxiety experienced by students has been discussed extensively for many decades. While the phenomenon is widely recognized, little attention has been paid to seeing its

specific effect on marginalized sections of the society. The study attempts to understand the library anxiety experienced by students at three different universities in Assam. Assam is the only state in Northeast India to have private, state, and central universities. These universities draw their student populations from several different hill states in Northeast India, all of which face significant socio-political-economic challenges.

Methods – A stratified random sample technique was used for the study. A total of 150 questionnaires were distributed equally among the three universities in Assam and found 119 questionnaires were fit for analysis. The study adopted the modified and validated version of the Bostick Library Anxiety Scale developed by Anwar, Al-Kandari, and Al-Qallaff (AQAK) in 2004, with 32 item statements and 4 categories. The questionnaire is divided into two parts: Demographic Variables and the Library Anxiety Scale. The categories used for the study were: Category 1 (Staff Approachability) – 11 statements; Category 2 (Feelings of Inadequacy) – 6 statements; Category 3 (Library Confidence) – 8 statements; and Category 4 (Library Constraints) – 7 statements.

Results – The study hypothesized that factors such as gender, the language of instruction, type of university, and caste or community do not influence library anxiety among Northeast India students. However, the study's findings suggest that type of university influences library anxiety among students and its three constructs. Tezpur university students experience a higher level of library anxiety. Although no overall significant difference in the level of library anxiety was observed among students across gender ($p=0.278$, $p>0.05$), the language of instruction ($p=0.023$, $p>0.05$), castes and communities ($p=0.223$, $p>0.05$), there was a significant difference in one construct of library anxiety among students based on gender (feelings of inadequacy), the language of education instruction (staff approachability), caste and community (feelings of inadequacy).

Conclusions – Results from the present study provided compelling evidence to suggest that many students, irrespective of their gender, the language of instruction, type of university, discipline, and caste or community experience library anxiety. The difference levels of library anxiety among independent variables indicate a critical lack of information literacy skills. Overall, library anxiety scores among the students were moderate; some categories such as staff approachability, the feeling of inadequacy, and library constraint are the attributes of the students' anxiety. However, the findings of the study also suggest that students are confident in using the library. They are optimistic, enthusiastic, and keen to use library resources.

Introduction

In recent years, there has been a strong aspiration for the Indian political class to upgrade the standing of Indian universities among other world-class academic institutions. Economist Amartya Sen endorsed the idea that formal education empowers individual employability, social confidence, and other 'capabilities' (Sen, 1999). However, despite many initiatives, there has been continued

criticism of publicly funded higher education in India, for underperforming in various parameters compared with global university standards (Tierney, Sabharwal, & Malish, 2019; Deshpande, 2006; Chanana, 1993). Reductions in higher education budgets, library budgets, and education policy have contributed significantly to the problem. More importantly, however, the government of India's reservation policies to the historically disadvantaged section of the society

in higher education is often criticized for undermining merit.

The historic Hindu caste system divided the majority of Hindu society into rigid hierarchical groups based on their *Karma* (work) and *Dharma* (Religion). They are divided into *Brahmins* (Priests, Teachers), *Kshatriyas* (Warriors), *Vaishyas* (Farmers, Traders, and Merchants), *Shudra* (Labourers), and *Dalits* (Outcastes). Discrimination based on caste lines is a common practice in India (Kumar & Hashmi, 2020). Dalits have historically experienced caste discrimination from the majority caste Hindu. These marginalized (i.e., educationally or socially disadvantaged) sections of the society include the *Dalits* (Scheduled caste or SC), *Adivasi* (Tribal or indigenous, Schedule tribe or ST), and later extended to Other Backward Classes (OBC).

Central universities are established under an act of the parliament. They are autonomous and funded by the Union Ministry of Higher Education (previously known as the Ministry of Human Resource Development). The Ministry of Education adopted an inclusivity policy that enabled students from the marginalized SC, ST, and OBC communities in India to pursue higher education and established mandatory reservation policies regarding OBC students (27%), SC students (15%), and ST students (7.5%). Subsequently, the reservation percentage was increased to 59.5% by including an additional 10% reservation for Economically Weaker Sections (EWS) provided that they do not identify themselves with any of the previously reserved categories of OBC, SC, or ST students. According to Tierney, Sabharwal, and Malish, students from marginalized communities such as SC, ST, and OBC communities encounter various challenges to complete graduation and perform in universities (Tierney, Sabharwal, & Malish, 2019). Research conducted at the prestigious Indian Institute of Technology provided evidence of the problems experienced by SC and ST students (Singh,

2017). Some of these problems may be related to library anxiety.

Academic libraries routinely conduct library orientation programs to promote the library and educate students to become self-reliant in using the library and becoming a lifelong learner. The students then apply these library skills to locate the required information and resources in the library. However, due to the overwhelming amount of information resources available, students are often confused and disoriented. The introduction of computers and information technology in academic libraries has further increased students' experience of disorientation (Jiao & Onwuegbuzie, 2004; Ahmed & Aziz, 2017). Today, technologically driven electronic resources have replaced traditional print resources. Thus, students who lack the necessary skills to cope with the rapid technological transition have often developed fear and anxiety when contemplating a library visit (Kohrman, 2003). Students may also experience library anxiety for other reasons, such as lack of self-confidence in the conduct of study, lack of information retrieval skills, lack of previous exposure to academic libraries, and lack of knowledge of library equipment and technology (Jiao & Onwuegbuzie, 2004).

Students in Northeast India may be particularly prone to experiencing these conditions because of the socio-political-economic isolation of the region from the rest of India. The Northeast region of India constitutes eight States: Assam, Meghalaya, Sikkim, Tripura, Mizoram, Manipur, Arunachal Pradesh, and Nagaland. The region has been marginalized in social, political, and economic terms compared with the rest of India due to its poor connectivity and communication resources, rugged terrain, and recurring armed conflicts. However, unlike the rest of India, ST and SC communities in Northeast India are geographically isolated, and as such they may have never experienced historical caste discrimination. However, people from the Northeast India experience racial

discrimination and are marginalized as they venture out from the northeast to seek employment and education (Wouters & Subba, 2013).

As a result of the government's inclusivity policy, students from different parts of India and Northeast India seek higher education in Assam as the state provides one of the region's best educational infrastructures. This level of access for all students ensures that Assam Universities' demographic profiles are very multicultural, representing Tribal, Dalit, Caste Hindu, Muslims, and Christians, thus providing an ideal environment for research investigating factors related to library anxiety.

Literature Review

Measuring Library Anxiety

Various researchers have adopted the Bostick Library Anxiety Scale (LAS) to understand library anxiety and its associated reasons. The studies by Jiao and Onwuegbuzie suggests that library anxiety could be correlated with personal characteristics such as age and nationality (Jiao, Onwuegbuzie, & Lichtenstein, 1996; Jiao, Onwuegbuzie, & Bostick, 2006); freshmen library experience (Jiao & Onwuegbuzie, 2004); low levels of academic self-competence (Jiao & Onwuegbuzie, 1999); cooperative students (Jiao & Onwuegbuzie, 2002); and physiological, cognitive, affective, and behavioral ramification (Jiao, Onwuegbuzie & Lichtenstein, 1996). Other researchers have also linked library anxiety with critical thinking and language (Kwon, Onwuegbuzie & Alexander, 2007; Sinnasamy & Karim, 2017). In their respective countries and cultures, several researchers have validated and altered the scale (Shoham and Mizrachi, 2001; Świgoń, 2011; Anwar, Al-Qallaf, Al-Kandari & Al-Ansari et al., 2012; Song, Zhang, & Clarke, 2014). However, Ahmed and Aziz who conducted a study at Bangladesh University challenged Bostick's LAS psychometric soundness in a developing country perspective

(Ahmed & Aziz, 2017). They argued that today's library infrastructure has undergone a significant change ever since Bostick proposed LAS in 1992 (Ahmed & Aziz, 2017).

Measuring Library Anxiety with Special Populations

In 2004, Anwar, Al-Kandari, and Al-Qallaf developed a new scale (AQAK) based on the original Bostick LAS to examine the status of library anxiety among undergraduate students of Kuwait whose mother tongue was Arabic but used English as a second language. The study found differences in categories such as feelings of inadequacy and library constraints. Kuwaiti students who were weak in English were more likely to face frustration sooner and displayed a higher level of library anxiety (Anwar, Al-Kandari, & Al-Qallaf, 2004). Similarly, Jiao, Onwuegbuzie, and Bostick (2004) conducted the first study that focused on race as a factor in the level of library anxiety. They studied the library anxiety among Caucasian-American and African-American graduate students and reported that African-American students have lower library anxiety levels correlated with three dimensions of library anxiety than their Caucasian-American peers (Jiao, Onwuegbuzie, & Bostick, 2004; Jiao & Onwuegbuzie, 2004).

Using the AQAK scale, another survey conducted at Kuwait University by Anwar, Al-Qallaf, Al-Kandari, and Al-Ansari stated that there is no significant relationship between gender, school, or college history in the library anxiety score (Al-Qallaf, Al-Kandari & Al-Ansari, 2012). Correspondingly, research conducted among international students indicates no substantial difference in the degree of library anxiety scores between gender and discipline (Lu & Adkins, 2012). However, modifying the existing Bostick LAS, Doris, Provata, and Vraimaki developed the Greek Library Anxiety Scale (G-LAS) and found that male students experienced higher anxiety scores than female students (Provata & Vraimaki,

2015). This phenomenon according to researchers is due to the fact that female students are more driven and prefer to go to the root of a specific problem with persistence and depth compared to their male counterparts (Kennedy, Wellman & Klement, 2003; Halder & Chakrabarty, 2010). Shehata and Elgllab's recent comparative study of library anxiety among Saudi Arabian and Egyptian students found that Egyptian students were more anxious about using libraries than Saudi Arabian students (Shehata & Elgllab, 2019).

Library Anxiety Studies in Developing Countries

Numerous studies from developing countries have also been conducted in recent years to explain library anxiety among students. Noor Harun and Ansari implemented a modified version of Bostick's LAS that examined the effects of gender, nationality, and bibliographic instruction on library anxiety among Malaysian students. The findings of their analysis suggest that there is a statistically significant mean difference between Malaysian and non-Malaysian students in the affective barriers portion of library anxiety. Malaysian students experience higher library anxiety related with affective barriers than their non-Malaysian counterparts (Noor Harun & Ansari, 2011). Similarly, Sinnasamy and Karim conducted a study among Malaysian students and reported the prevalence of at least one or more library anxiety dimensions among non-native English Malaysian students. Research shows that higher library anxiety scores have been associated with the language barrier (Sinnasamy & Karim, 2017).

Adopting the AQAK modified LAS, Jan, Anwar, and Warraich conducted a study among Pakistani students to examine the relationship between library anxiety with library use, gender, academic performance (grade point average), and academic discipline. The results of the study showed that students experience moderate anxiety in the library, and there is a statistically

significant difference in gender and discipline anxiety in the library. However, Jan, Anwar, and Warraich (2016) found that library anxiety and academic performance were inversely proportional. Similarly, adopting the qualitative method, Abusin & Zainab (2017) conducted a study in Africa using the diary method among Sudanese university students. They found that, when using the academic library to write their first research paper, 88.2% of the students displayed fear and anxiety. The students also reported on the language barrier, particularly English, where the mastery of the English language among students was found to be poor. In Bangladesh, Ahmed & Aziz (2017) conducted a study using the original Bostick scale to indicate that university students may experience anxiety related to library services based on their technological proficiency.

Aims

This research study attempts to understand the nature of marginalized students' library anxiety experience in Northeast India.

The research questions that motivated this study were:

- Does gender, educational background, or language influence students' library anxiety score in three different university settings?
- Does discipline or type of university in which they study influence students' library anxiety score in three other university settings?
- Does caste and community influence students' library anxiety score in three different university settings?

Methods

Participants in the Study

The present study selected three universities in Assam. The state of Assam is the only Northeast

state of India to have private, state, and central universities. Central universities are union government-funded universities established under parliament's act, and they follow the central reservation policy. The state government funds state universities and follows the state reservation policy, which is different from the central reservation policy. Private universities are purely self-funded and do not follow any reservation policy. The three universities selected for the study were: Kaziranga University (private), Dibrugarh University (state), and Tezpur University (central). The libraries in these universities are well equipped with modern and integrated library systems. They cater to students from all of the six neighboring hill states of Assam and elsewhere in the country. The total population of the students was 2,560 (Kaziranga University), 4408 (Dibrugarh), and 3,059 (Tezpur University).

The sampling technique used for the study was a stratified random sampling technique. Lists of first-year students enrolled in the year 2017 for a Master's degree in Arts, Commerce, Management, and Science were considered for the study. The sample did not include Medicine, Engineering, or research-based degrees like JD or Ph.D. The study identified 3 universities, and 50 students from each university were randomly selected using Microsoft Excel's random number generation function. The total number of first-year postgraduate students enrolled in the academic year 2017-18, in all three universities in total, was 1,578. A sample pool of 150 students represents approximately 10% of the population. For the data collection, the researchers personally visited each university to distribute the questionnaire and then collected them with the help of volunteers from April 23rd to June 19th, 2018. Since the sampling technique was stratified random, the respondents were identified before and informed over e-mail that they would need to assemble at a venue, based on their convenience, for data collection. The number of responses

received from the three universities was Kaziranga University (38 responses), Dibrugarh University (39 responses), and Tezpur University (42 responses), with a total response rate of 79.3% in aggregate (119 out of 150). Data were analyzed using EXCEL and SPSS.

Instrument and Procedures

The questionnaire (see Appendix A) consists of demographic variables and the Library Anxiety Scale (LAS). The LAS consists of 4 categories and 32 statements as modified and validated by Anwar, Al-Kandari & Al-Qallaf (2004) from the original Bostick Library Anxiety Scale. The categories used for the study are Category 1 (Staff Approachability) – 11 statements, Category 2 (Feelings of Inadequacy) – 6 statements, Category 3 (Library Confidence) – 8 statements, and Category 4 (Library Constraints) – 7 statements. These statements are rated based on students' library experiences using a five-point Likert scale (1, strongly disagree; 2, disagree; 3, undecided; 4, agree; and 5, strongly agree). The study adopted Independent t-test and ANOVA tools for statistical analysis. The Independent t-test was used to analyze the difference between two categories or groups such as gender, group, or college. In contrast, the one-way ANOVA was used to analyze the differences in more than two groups/categories such as communities, language, university, and educational background.

Results

Demographic Data

Table 1 shows the demographic profile of 119 respondents. All but 9 of the students (92.44%) hail from Northeastern states, and just 7.5% of respondents hail from outside Northeastern states. Based on the respondent's community profile, the majority of the respondents belonged to OBC (35.3%), followed by General (33.6%), ST (19.3%), and SC (11.7%).

Table 1
Frequency and Percentage of the Respondents from Assam Universities in India

Sl. No.	Variables	Categorization	No. of Respondents	%
1.	Gender	Male	60	50.42%
		Female	59	49.58%
2.	Nativity (Geographical origin)	North-East Students	110	92.44%
		Outside North East	9	7.56%
3.	Caste/Community	General	40	33.60
		OBC	42	35.30
		SC	14	11.76
		ST	23	19.34
4.	College Education Background	Private	52	43.69
		Public	67	56.31
5.	Schooling Education Background	Private	67	56.30
		Public	52	43.70
6.	Language of Instruction in School	English	56	47.1
		Vernacular	25	21.0
		Both	38	31.9
7.	School Educational Institution Location	Urban	41	34.4
		Rural	36	30.3
		Semi Urban	42	35.3
8.	Library in College	Yes	119	100.0
		No	0	0.0
9.	Library in School	Yes	87	73.10
		No	32	26.90

The study results also indicated that the majority (56.31%) of the respondents graduated from a public-funded institution, while 43.69% of respondents graduated from a private institution. By comparison, most of the respondents (56.30%) completed their school education at a private institution compared to 43.70% of respondents from publicly funded government schools. Similarly, most of the respondents reported English (47.1%) as the language of instruction in their schools, while only 21% used a vernacular language; 31.9% of respondents stated that both English and vernacular were the languages of instruction. For the students who belong to Northeastern states, the primary languages of instructions were English, Bhutia, Bodo, Khasi, Meitei, and Mizo (Lushei).

The majority (35.3%) of the respondents graduated from the semi-urban schools, followed by 34.4% urban and rural (30.3%). Interestingly, while 100% of the respondents stated there was a library in their college, only 73.1% of the respondents acknowledged having a library in the school. In comparison, 26.9% of respondents did not have a library in their school. Library hours in schools are mandatory in the timetable to foster good reading habits, but are not mandatory in college.

Reliability and Normality of Library Anxiety Scale

Cronbach's alpha is a statistical analysis or tool that demonstrates the reliability of scales. For the present study, Anwar's (2004) scale was adopted to measure the level of library anxiety among postgraduate students. The LAS was administered and pre-tested for culturally different populations of university students in Assam. The pilot study and pre-testing result indicated that the Cronbach's alpha (Table 2): (i) Staff approachability - 0.85, (ii) Feeling of inadequacy - 0.79, (iii) Library confidence - 0.73 and (iv) Library constraints - 0.74 and the overall scale of 0.87. From Appendix B Table 2 the Null

Hypothesis of Data Normally Distribution cannot be rejected at a 1% level for all the variables. Therefore, it can be concluded that the data are normally distributed (Staff approachability, Feelings of inadequacy, Library confidence, and Library constraints).

Table 2
Cronbach's Alpha Score

Sl. No.	Category	Cronbach's alpha score
1.	Staff approachability	0.85
2.	Feelings of inadequacy	0.79
3.	Library confidence	0.73
4.	Library constraints	0.74
5.	Overall Scale	0.87

Hypothesis Testing

We hypothesized that library anxiety is not prevalent among students from marginalized castes or communities. Factors such as gender, the language of instruction, discipline, and type of university a student attends do not contribute to anxiety.

Hypotheses for the study

H01: Gender of the student does not have any influence on library anxiety.

H02: Students' language of school instruction does not influence library anxiety levels.

H03: Type of university does not influence the level of library anxiety.

H04: Caste and community do not influence library anxiety among students.

Table 3

T-test of Library Anxiety Score Library Score of Students with Respect to Gender and Education Background (School and College)

Variable	Group	N	Category 1	Category 2	Category 3	Category 4	Total	
			Staff Approachability	Feelings of Inadequacy	Library Confidence	Library Constraints		
			Mean	Mean	Mean	Mean	Mean	
Gender	Male	60	44.85 (5.87)	20.70 (4.70)	16.77 (3.46)	24.97 (3.77)	107.28 (11.53)	
	Female	59	44.80 (5.09)	18.85 (4.55)	16.88 (3.42)	24.68 (3.01)	105.20 (9.12)	
	<i>t</i>			0.053	2.129**	0.182	0.461	1.090
	<i>p</i> -value			0.958	0.035	0.856	0.646	0.278
	<i>Cohen's D</i>			0.009	0.390	-0.033	0.084	0.200
School	Private	67	44.36 (5.74)	19.42 (4.67)	17.34 (3.72)	24.60 (3.40)	105.72 (10.62)	
	Public	52	45.42 (5.10)	20.25 (5.01)	16.15 (2.91)	25.12 (3.42)	106.94 (10.19)	
	<i>t</i>			-1.053	-0.934	1.898	-0.823	-0.635
	<i>p</i> -value			0.294	0.352	0.060	0.412	0.526
	<i>Cohen's D</i>			-0.196	-0.172	0.375	-0.152	0.117
College	Private	52	44.15 (6.45)	19.42 (4.80)	17.33 (3.71)	24.63 (3.60)	105.54 (11.70)	
	Public	67	45.34 (4.56)	20.06 (4.85)	16.43 (3.17)	24.97 (3.27)	106.81 (9.34)	
	<i>t</i>			-1.178	-0.714	1.417	-0.532	-0.657
	<i>p</i> -value			0.241	0.477	0.159	0.596	0.512
	<i>Cohen's D</i>			-0.213	-0.131	0.259	-0.097	-0.119
Library in School	Yes	87	44.33 (5.55)	20.08 (4.69)	16.96 (3.52)	24.74 (3.36)	106.16 (10.74)	
	No	32	46.15 (5.17)	18.87 (5.14)	16.53 (3.21)	24.90 (3.67)	106.46 (9.96)	
	<i>t</i>			-1.663	1.159	0.635	-0.222	-0.144
	<i>p</i> -value			0.102	0.252	0.528	0.825	0.886
	<i>Cohen's D</i>			-0.338	0.245	0.127	-0.045	-0.029

**Significance at 5%, Value in parenthesis is Standard deviation (SD)

Influence of Gender on Library Anxiety

H01: Gender of the student does not have any influence on library anxiety.

Table 3 shows that there is no significant influence of gender on library anxiety scores between male and female students ($t(117) = 1.090, p=0.278$). However, the result of the scores suggests that there is a significant difference in library anxiety scores between males and females in *feelings of inadequacy* (Category 2, $p=0.035$). The male respondents (Mean=20.70) have higher library anxiety when compared with female respondents. The effect size for the test feelings of inadequacy is 0.390, which is termed as small (Cohen, 1992).

Influence of Medium (Language) of Instruction in Schools on Library Anxiety

H02: Students' language of school instruction does not influence library anxiety levels.

Table 4 shows that the significance value of the language variable (language of education instruction) is more than 0.05. Hence, the null hypothesis (H_{02}) cannot be rejected. The medium of education instruction in schools does not influence the overall library anxiety of the students. But there is an influence of medium of instruction on *staff approachability* (second construct of library anxiety) as the significance value is less than 0.05 ($p = 0.015$) with the effect size F statistics for the test staff approachability being 4.33. However, there was no significant difference in the level of *feelings of inadequacy*, *library confidence*, and *library constraints* among students coming from different mediums of instruction in schools. The effect size (partial eta square) for category 1 (staff approachability) is 0.069 which is termed as medium effect size (Cohen, 1992).

Influence of Type of University on Library Anxiety

H03: Type of university does not influence the level of library anxiety.

Table 4 shows that the significance value for university (types) is less than 0.05. Hence, the null hypothesis H_{02} is rejected. This implies that there is an influence on the types of universities on the level of library anxiety, except category 3 (library confidence), where the p -value of category 3 is more than 0.05. The results show there is an effect of university (types) on three categories; staff approachability ($p=0.000, p < 0.05$, effect size =0.157), feelings of inadequacy ($p= .000, p < 0.05$, effect size= 0.137) and library constraints ($p = .001, p < 0.05$, effect size= 0.114) as their respective p values are less than 0.05. However, there was no significant difference in the level of library confidence among students studying in different universities. The results also suggest that among the universities, Tezpur University students experience higher levels of anxiety than students at the other two universities. The Effect Size (partial eta square) value for library anxiety is 0.174, which is termed as a medium effect size (Cohen, 1992). Similarly, student disciplines such as social science, science, and humanities do not influence library anxiety in all the constructs ($p=0.381, p>0.05$).

Influence of Caste/Community on Library Anxiety

H04: Caste and community do not influence library anxiety among students.

As shown in Table 4, there is no significant difference in library anxiety levels among different student communities as a significant value for the variable community is more than 0.05 ($p=0.223$). Hence, the null hypothesis H_{03} cannot be rejected. Therefore, there is no influence of the caste/community on library anxiety levels. However, the p -value in the category (feelings of inadequacy) is less than

Table 4

One-Way ANOVA Result of Library Anxiety Score with Respect to University, Discipline, Community, and Language

Variable		N	Category 1	Category 2	Category 3	Category 4	Total Library Anxiety	
			Staff Approachability	Feelings of Inadequacy	Library Confidence	Library Constraints	Mean	
			Mean	Mean	Mean	Mean	Mean	
University	Dibrugarh University	39	43.67 (3.99)	17.87 (4.63)	17.08 (3.30)	24.18 (2.88)	102.79 (8.03)	
	Kaziranga University	38	42.82 (5.66)	19.21 (3.72)	17.53 (3.68)	23.79 (3.35)	103.34 (10.42)	
	Tezpur University	42	47.71 (5.38)	22.07 (5.02)	15.95 (3.19)	26.36 (3.42)	112.10 (10.01)	
	F			10.84***	9.20***	2.31	7.45***	12.19***
	p value			0.000	0.000	0.104	0.001	0.000
	Effect Size (Partial Eta Square)			0.157	0.137	0.038	0.114	0.174
Discipline	Humanities	4	45.50 (2.38)	18.75 (3.77)	16.25 (2.63)	24.75 (2.50)	105.25 (4.99)	
	Science	80	44.29 (5.59)	19.60 (4.87)	16.73 (3.37)	24.78 (3.46)	105.40 (10.71)	
	Social Science	35	45.97 (5.37)	20.31 (4.87)	17.11 (3.69)	24.91 (3.43)	108.31 (10.08)	
	F			1.19	0.36	0.21	0.02	0.97
	p-value			0.308	0.699	0.809	0.983	0.381
	Effect Size (Partial Eta Square)			0.020	0.006	0.0040	0.000	0.016
Caste/Community	General	40	44.98 (5.15)	19.83 (5.03)	16.60 (3.34)	25.65 (3.62)	107.05 (9.28)	
	OBC	42	44.60 (5.29)	20.90 (4.28)	17.05 (4.00)	24.50 (3.13)	107.05 (10.40)	
	SC	14	43.93 (7.61)	16.64 (5.77)	16.00 (2.86)	24.21 (4.14)	100.79 (14.41)	

	ST	23	45.52 (5.11)	19.57 (4.14)	17.30 (2.79)	24.35 (2.93)	106.74 (9.10)	
	F		0.279	2.89**	0.530	1.218	1.481	
	p-value		0.840	0.038	0.663	0.306	.223	
	Effect Size (Partial Eta Square)		0.007	0.070	0.014	0.031	0.037	
Language	English	56	43.34 (5.43)	19.54 (4.39)	17.45 (3.52)	24.32 (3.36)	104.64 (10.97)	
	Vernacular	25	45.60 (5.70)	20.36 (5.96)	16.68 (3.69)	25.84 (4.23)	108.48 (11.57)	
	Both	38	46.50 (5.00)	19.76 (4.69)	16.00 (3.00)	24.89 (2.72)	107.16 (8.50)	
	F			4.33**	0.25	2.08	1.75	1.39
	p-value			0.015	0.779	0.130	0.178	0.252
	Effect Size (Partial Eta Square)			0.069	0.004	0.035	0.029	0.023

*** Significant at 1%, ** Significant at 5%, Value in parenthesis is Standard deviation (SD)

0.05, indicating that there is an influence of community on feelings of inadequacy ($p=0.038$). The interesting observation from the testing communities indicated that OBC students experience more anxiety during their visit to the library.

The F statistics for feelings of inadequacy are 2.89 with a p-value of less than 0.05 ($p=0.038$). Hence, community background influences library anxiety scores among students for feelings of inadequacy. The effect size (partial eta square) for the same (feelings of inadequacy) is 0.070, which is termed as medium effect size (Cohen, 1992).

Subsequently, other factors considered for the study included whether the students' educational background, such as type of school, college, or presence of the library in their school, determine their library anxiety level.

Library Anxiety Among Students with Different School and College Educational Backgrounds

Table 3 shows the library anxiety score of students based on their college and school educational backgrounds. Overall result of t-test suggests that there is no significant difference among students from different educational backgrounds, for both college ($t(117) = 0.657, p = 0.512$) and school ($t(117) = -0.635, p = 0.526$). Therefore, before joining the university, whether a student studied in a private or public school or college is immaterial.

Discussion

The university library commonly causes library anxiety in Northeast India. Using library jargon to explain a complicated interface following an obscure classification scheme may lead to higher LAS values. The study's findings confirm the occurrence of library anxiety among the students who responded to our questionnaire. Irrespective of their gender, the language of school instruction, type of university, caste, and

community, library anxiety as a phenomenon is common among students. The questionnaire responses indicate that the anxiety score level was mild (overall mean score = 3.31) among the students studying at the three sample universities in Assam. However, the study found interesting trends.

The present findings are in line with previous studies (Anwar, Al-Qallaf, Al-Kandari & Al-Ansari, 2012; Lu & Adkins, 2012; Lawless, 2011). The current study results suggest no significant difference in library anxiety scores between male and female students. However, male students experience higher anxiety levels in the categories of inadequacy (Categories 2, $p=0.035$) than female students. The male students indicated a sign of confusion, unsure of using the library. Perhaps the Indian culture of very sociable female students and their motivation to compete with the opposite sex greatly reduces their anxiety while visiting the library.

Although the language of instruction in their education did not significantly influence library anxiety, students coming from vernacular and both (Vernacular and English) as the medium of instruction experience severe library anxiety in the category of staff approachability (average is 4.15 and 4.23). Hence, students either experience communication problems, lack the confidence to communicate with library staff, or perceive library staff as unfriendly. Simultaneously, students' low scores (average of 2.18, 2.09, and 2.00) in the category library confidence (negative construct) suggest the lack of confidence and comfort in making use of library services.

This finding suggests that teaching information literacy may lead to greater familiarity with the library resources and less anxiety, as Whitmire (2007) found. Furthermore, it is possible that the language barrier between the students and the library staff further increases the level of library anxiety.

The student's discipline does not influence library anxiety, but the type of university does. Students at the central university (Tezpur University) exhibited the highest library anxiety level (average was 3.50) among the three universities. Tezpur university students experience severe anxiety in the categories staff approachability (Mean average 4.34), feelings of inadequacy (Mean average 3.68), and library constraints (Mean average 3.77). Tezpur University is a central university, and the infrastructures, including library resources, are funded by the central (Union) government. It was ranked 29th by the National Institutional Ranking Framework (NIRF) in 2019, and students enrolled from all over the country. Unlike state and private universities, Tezpur University conducts an annual national entrance examination for university admission students. There is, therefore, an enormous competition among students to get admission to one of India's leading universities. Hence, students experience anxiety in communication, assistance, restrictive library rules, regulations, and library resources.

Based on previous research from the majority caste Hindu perspective, the researchers hypothesized that there would be a significant difference in the experience of library anxiety among the marginalized students of Northeast India based on caste/community. However, this study's results suggest that there is no significant difference in the level of anxiety among students from different castes/communities ($p=0.223$, $p>0.05$). Interestingly, students with an OBC or General community profile experience higher library anxiety (average means 3.35) while Schedule Caste students' level of anxiety is the lowest among the group of students (average mean 3.15). This study's findings are in line with Jiao, Onwuebuozie, and Bostick's findings that African Americans demonstrated lower library anxiety levels than their Caucasian-American counterparts. However, unlike Jiao, Onwuebuozie, and Bostick, the students who

participated in the study were from three universities and did not differ in the types of the institution they attended. One possible explanation of this phenomenon is that participants were among the highest-achieving ST and SC graduate students in the Northeastern Region and the rest of India. In addition, unlike their counterparts elsewhere in India, indigenous tribal (ST) and scheduled caste (SC) groups in northeast India may have never encountered historical caste discrimination.

Limitations and Suggestions for Future Research

The limitation of the study was that the sample was limited to only three universities in Assam. Hence, the sample size for each category was small and limited the possibility of generalizing the results.

The LAS scale adopted for the survey was the AQAK (a modified version of the Bostick scale developed for use among Kuwaiti undergraduate students whose mother tongue was Arabic). Although the present scale's reliability was good, developing and validating a new version of the original Bostick scale with 43 statements complying with the Indian multicultural context would significantly contribute to the knowledge base. The questionnaire did not include the desired number of representations from students outside Assam that may help provide a better understanding of the language barrier. Although the questionnaire helped determine the students' overall anxiety level, including an open-ended questionnaire for respondents' comments could provide more insight into the reasons for the anxiety.

Conclusion

Students enrolled in universities world-wide are required to submit assignments every semester that require a visit to the library for resources. Previous research literature suggests that library

anxiety may result in library avoidance, procrastination, poor quality deliverables, and even increased dropouts among the students (Onwuegbuzie & Jiao, 2000). Therefore, it is important to look for ways to reduce library anxiety in student populations. The present study and those from the previously published research provide compelling evidence to suggest that many students experience library anxiety. They lack the confidence and communication skills to seek help from a librarian successfully. Schools and colleges are intended to impart necessary prerequisite library skills, information resources, and research skills, bridge the gap, and prepare students for university; however, students often remain unprepared. Although the overall library anxiety score among the students was found to be moderate (overall average score= 3.32), the findings indicate that library classification schemes, confusing formats, unfamiliar jargon, RFID, imposing online catalogue systems, and unfriendly library staff made a significant contribution to the degree of library anxiety. Similarly, categories such as staff approachability, feelings of inadequacy, and library constraint indicated higher anxiety scores among the students.

Many of the students in Assam come from the neighbouring states of Northeast and other states in India. The student's cultural background and unfamiliarity with the existing library system contributed significantly to the level of library anxiety. While some of them may be familiar with library systems in their previous schools and colleges, their present university's existing resources and technology may differ. Hence, library orientation and library instruction to the newly enrolled student could reduce the anxiety levels. While the students' previous school instruction's language does not significantly influence the overall level of library anxiety, there is a significant difference in staff approachability.

Although the results of this study indicated no significant difference in the level of library anxiety based on caste/community or gender, there was a substantial difference in the feeling of inadequacy across these variables. Furthermore, there was a significant difference in library anxiety among students based on the different languages of instruction and the university that the student attended. Students enrolling in the university whose medium of instruction while in school was vernacular or both (Vernacular and English), experience higher anxiety than students from the English medium of instruction when approaching the staff of the library. Furthermore, since English is now the universally accepted standard for scholarly communication in India and elsewhere, the potential for students' scholastic achievements and academic discourse could depend on their mastery of the English language. Finally, the results from the present study provide strong evidence to suggest that while many students, irrespective of their caste/community and/or gender experience library anxiety, many students are confident in using the library. These students are optimistic, enthusiastic, and keen to use library resources. Overall, library anxiety scores among the student population were found to be moderate, and while some categories such as *staff approachability*, *the feeling of inadequacy*, and *library constraint* exist, these are areas in which increased library orientation and library instruction, to the newly enrolled student, could reduce the level of the anxiety the student experiences.

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Appendix A

Library Anxiety Among Post-Graduate Students in India: A Survey

1. Name: Mr. /Ms. (Optional).....
2. Gender: Male Female
3. State/Country:
4. Existing Educational Qualification:
5. PG Course undertaken:
6. Department:
7. Name of Institute:.....
8. Community: (a) General (b) OBC (c) SC (d) ST (e) Others
9. College Educational background: (a) Private University (b) Public (c) NGO funded
10. Schooling background: (a) Private Institution (b) Public (c) NGO funded Institution
11. Medium of Instruction in Schools: (a) English (b) Vernacular (c) Both
12. My College had a library: (a) Yes (b) No
13. My school had a library: (a) Yes (b) No

Category 1: Staff approachability

- S2 The librarians are unapproachable.
- S3 The reference librarians are unhelpful.
- S4 The librarians don't have time to help me because they're always on the telephone.
- S5 I can't get help in the library at the times I need it.
- S6 Library clerks don't have time to help me.
- S7 The reference librarians don't have time to help me because they're always busy doing something else.
- S11 The reference librarians are not approachable.
- S18 The reference librarians are unfriendly.
- S24 The library staff doesn't care about students.
- S29 Librarians don't have time to help me.
- S33 The library staff doesn't listen to students.

Category 2: Feelings of inadequacy

- S1 I'm embarrassed that I don't know how to use the library.
- S8 I am unsure about how to begin my research.
- S9 I get confused trying to find my way around the library.
- S10 I don't know what to do next when the book I need is not on the shelf.
- S27 I don't understand the library's overdue fines.
- S32 I don't know what resources are available in the library.

Category 3: Library confidence

- S12 I enjoy learning new things about the library.
- S13 If I can't find a book on the shelf, the library staff will help me.
- S15 I feel comfortable using the library.
- S17 I feel comfortable in the library.
- S19 I can always ask a librarian if I don't know how to work a piece of equipment in the library.
- S20 The library is a comfortable place to study.
- S25 The library is an important part of my college.

S26 I want to learn to do my own research.

Category 4: Library constraints

S14 There is often no one available in the library to help me.

S16 I feel like I'm bothering the reference librarian if I ask a question.

S21 The library never has the materials that I need.

S22 I can never find things in the library.

S30 The library's rules are too restrictive.

S31 The directions for using the computers are not clear.

S34 The library won't let me check out as many items as I need.

Appendix B

LAS Scores

Table 1
Anwar et al (2004) Proposed Categories for LAS Scores

No Anxiety	1.00 – 2.21*
Low Anxiety	2.22 – 2.65
Mild Anxiety	2.66 – 3.54
Moderate Anxiety	3.55 – 3.98
Severe Anxiety	3.99 – 5.00

*The “No Anxiety” level was listed in the article as “0.00 – 2.21” but the lowest achievable score on the LAS is actually 1.00 (Lawless, 2011).

Table 2
Tests of Normality^s

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Library Anxiety	0.074	119	0.159	0.986	119	0.238
Staff approachability	0.075	119	0.095	0.976	119	0.037
Feelings of inadequacy	0.073	119	0.180	0.982	119	0.124
Library confidence	0.080	119	0.057	0.977	119	0.048
Library constraints	0.083	119	0.041	0.979	119	0.059

Table 3
Mean Score of Library Anxiety

Variable		Category 1		Category 2	Category 3	Category 4	Library Anxiety
		Staff Approachability		Feelings of Inadequacy	Library Confidence	Library Constraints	
		N	Mean	Mean	Mean	Mean	Mean
University	Dibrugarh University	39	3.97	2.98	2.14	3.45	3.21
	Kaziranga University	38	3.89	3.20	2.19	3.40	3.23
	Tezpur University	42	4.34	3.68	1.99	3.77	3.50
	Over all Mean		4.07	3.29	2.11	3.54	3.31
Gender	Male	60	4.08	3.45	2.10	3.57	3.35
	Female	59	4.07	3.14	2.11	3.53	3.29
	Over all Mean		4.08	3.30	2.11	3.55	3.32
Community	General	40	4.09	3.31	2.08	3.66	3.35
	OBC	42	4.05	3.48	2.13	3.50	3.35
	SC	14	3.99	2.77	2.00	3.46	3.15
	ST	23	4.14	3.26	2.16	3.48	3.34
	Over all Mean		4.07	3.21	2.09	3.53	3.30
Language	English	56	3.94	3.26	2.18	3.47	3.27
	Vernacular	25	4.15	3.39	2.09	3.69	3.39
	Both	38	4.23	3.29	2.00	3.56	3.35
	Overall Mean		4.11	3.31	2.09	3.57	3.34